Records broken as temperate end to March offsets earlier cold spell

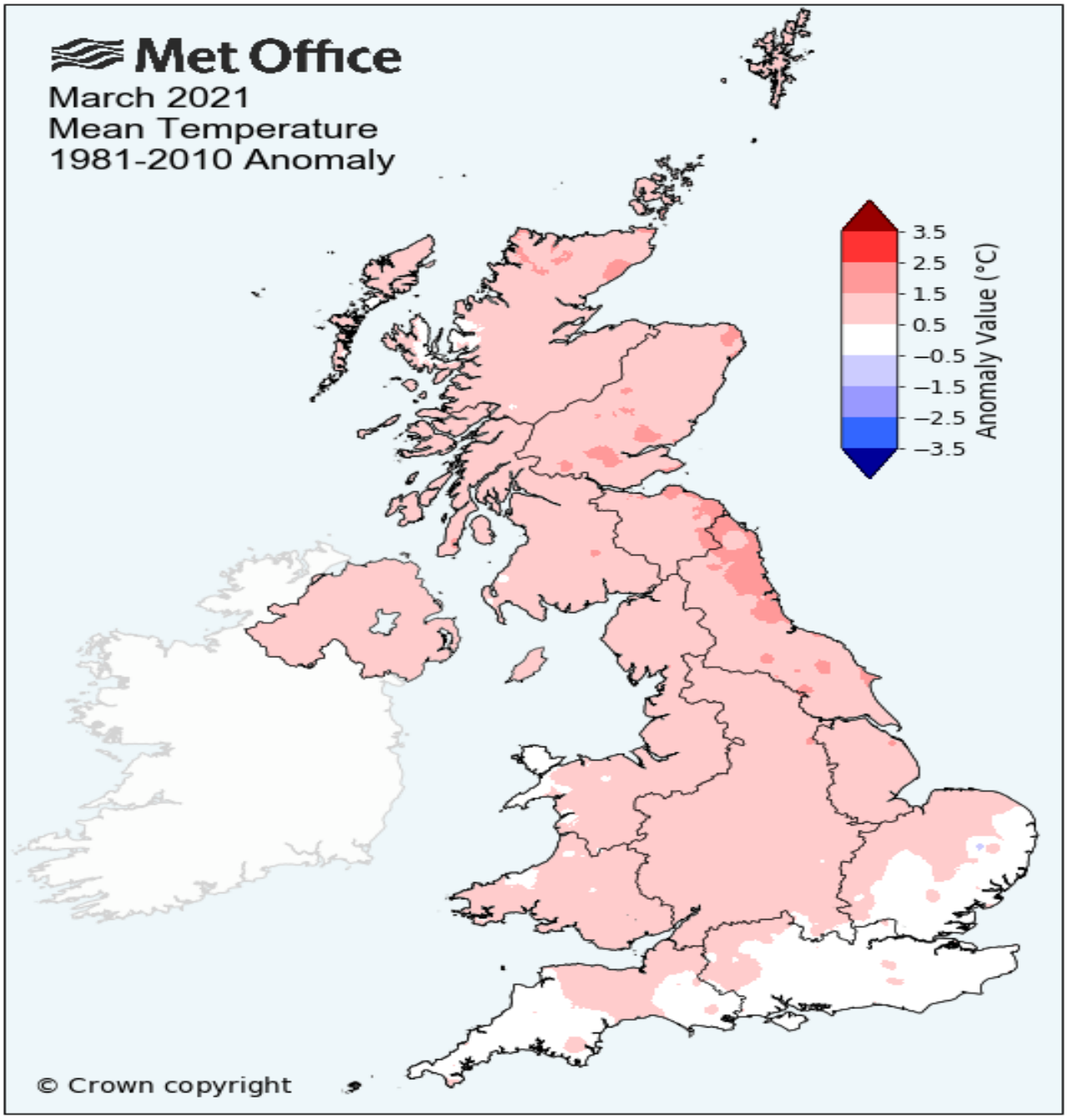
Description

March 2021’s overall provisional climate statistics show a 0.9°C average temperature increase from 1981-2010 national averages for the month, as some high temperatures during the latter part of the month saw several stations break their existing records for their warmest March day.

Particularly low temperatures started the month for large parts of the country, especially in southern England, but this was then balanced by late March temperature highs that brought the average temperatures for the month above what would normally be expected. For the UK as a whole, the March temperature was 0.9°C above the 1981-2010 average. Moreover, northern England, Scotland and Northern Ireland can look back on March as slightly warmer than average.

The last week of March saw several notable station records for the warmest March day being broken. Bude (Cornwall) recorded its highest temperature ever for a March day at 23.4°C, with the previous record having been in place since 1968 when 21.2°C was recorded. It was a similar story for stations across the UK, as, among others, Kew Gardens (Greater London), Lyneham (Wiltshire), and Oxford broke long-standing March daily temperature records. Many March daily high temperature records were broken, with the vast majority being reported on 30 March, although temperatures remained well above average for many stations on 31 March.

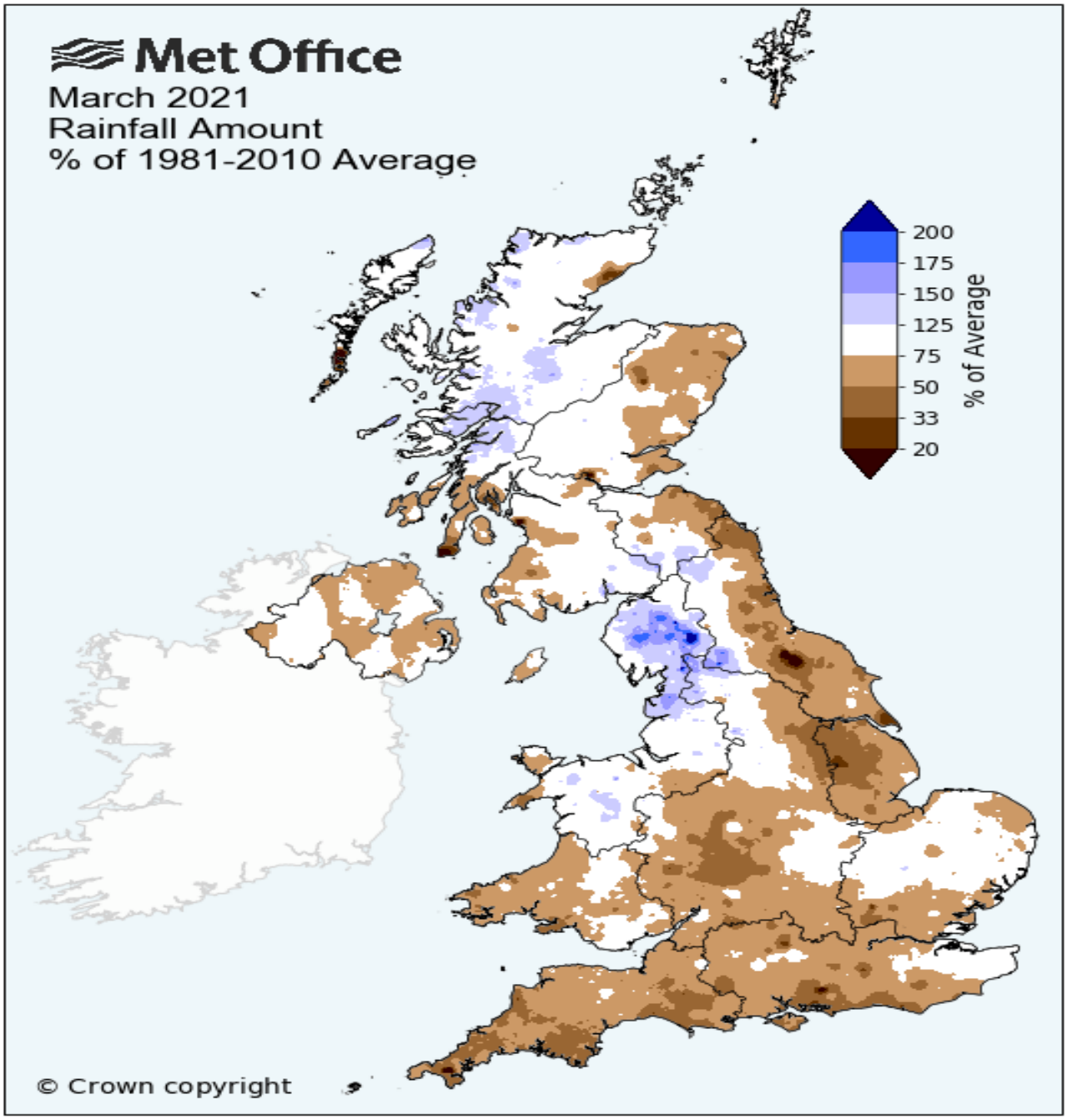
It wasn’t only daytime temperatures that were notably high. With temperatures staying above 12.7°C on 30 March at Kinloss (Moray) it was the highest March daily minimum temperature for Scotland on record.



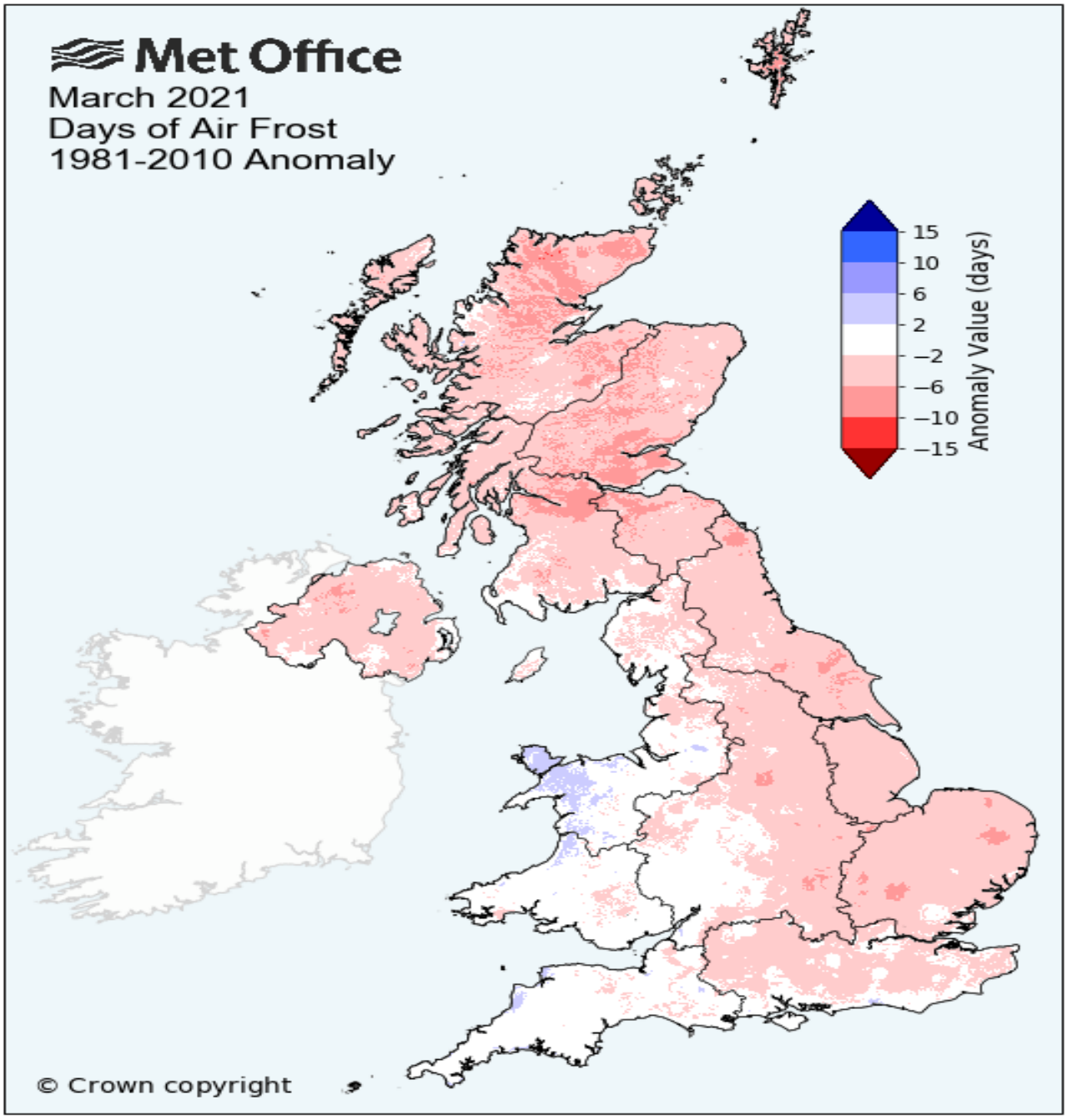
In terms of rainfall, the month was drier than average for southern, central and eastern areas, although northwest England saw more rain than usual, thanks to persistent heavy showers from 9 March to 14 March and rain from 24 March to 28 March. Cumbria saw 41% more rain than average, which was the most above average of any of the UK's counties. The wettest day of the year so far was on 28 March when 177.2mm was recorded at Seathwaite in Cumbria.

Dry conditions were reported for much of the country, however, with Cornwall, Worcestershire, Tyne & Wear, and the Isle of Wight all having less than half of their average rainfall for March. Southern England overall was on average 36% down on the rainfall average for March, while only Scotland and northern England got to their March average, both at 100% in total each. The UK as a whole had 89%

of the average rainfall for the month.



Days of air frost for the month were in relatively short supply across eastern England, Scotland and Northern Ireland. However, large parts of the South West and Wales got to their March averages, while north-west Wales crept above the average.



Mark McCarthy, from the National Climate Information Centre, said: “With the exception of some record-breaking highs at the end of the month, March didn’t deviate too much from what we’d expect to see for the time of year. It was warmer than average overall, but a cold first week balanced the milder end to the month.

“It was dry for a lot of areas, but northwest England took the brunt when it came to the month’s rainy weather.

“The most notable factor was the high temperatures at the end of the month, with a number of stations recording their warmest March day since we’ve been recording the data.”

Provisional March 2021	Mean temp (°C)		Sunshine (hours)		Rainfall (mm)	
	Actual	Diff from avg (°C)	Actual	% of avg	Actual	% of avg
UK	6.4	0.9	101.9	100	84.3	89
England	7.0	0.8	110.6	103	50.0	78
Wales	6.4	0.7	105.5	104	96.9	83
Scotland	5.3	1.1	91.1	98	140.4	100
N Ireland	6.8	1.0	74.1	75	74	78

Date Created
April 2021

Climate Data Challenge – working in partnership for innovation

Description

As Governments, organisations and individuals around the world seek to tackle the challenges of climate change, creativity and innovation are key to finding ways to improve our resilience to weather and climate.

UN CLIMATE CHANGE CONFERENCE UK 2021
Met Office
A CHANCE to GET OUR HANDS on CLIENT DATA...
WITH a BIG FOCUS on CLIMATE CHANGE...
INNOVATION
IMPACT
ALIGNMENT
1 NATURE BASED SOLUTIONS
2 MARINE + COASTAL
3 SUSTAINABLE DEVELOPMENT
TO ADDRESS the BIG ISSUES of the DAY...
Whole Range OF DISCIPLINES
POLICY MAKING
SCIENCE
POLITICS
1° ABOVE PRE-INDUSTRIAL LEVELS
THE HUMAN FINGERPRINT CLEARLY CONNECTED to CLIMATE CHANGE ISSUES
CHANGES in CLIMATE AROUND the WORLD
"CHANGE CAN'T HAPPEN LATER..."
WHAT CAN WE DO to HELP CLIMATE CHANGE?
UTILISING our DATA to COME UP with PRACTICAL SOLUTIONS
eg APPS
eg INTERACTIVE MAPS
Keeping AN OPEN MIND FOR POTENTIAL SOLUTIONS...
OUTPUTS with a LEGACY
"TURNING DATA INTO INFORMATION"
UK GBC
PML
MEDIN

Our scientists work at the forefront of global climate science, and with the approaching UN Climate Change Conference, COP26, we are stimulating innovation by bringing together a range of skills and information. Working with our partners we have been seeking new and exciting ways to better build solutions for understanding and visualising the risks and potential opportunities posed by a changing climate and the actions we take to manage it.

Our recent Climate Data Challenge virtual hackathon united around 200 participants from academia, other research establishments, Government departments, the Met Office and the private sector, and various disciplines including science, technology and policy. We worked with partners focussing on the challenges that climate change could bring to the following sectors: marine and coastal; nature-based solutions; and sustainable development. For each we invited delegates to tackle these challenges by imagining innovative ways to bring together data and other information.

“Whilst there is a huge amount of climate data available, there is also a vast quantity of other data, and it is through the combination of these that we can gain new insights and understanding,” explains Dr Mark Harrison, Met Office Strategic Head of UK Applied Science. “Through the Climate Data Challenge we wanted to give people from a wide range of disciplines the chance to explore climate resilience in a safe and creative environment.”

Responding to the challenge

Over the two days of this event, 21 multi-disciplinary teams used datasets such as the UK Climate Projections to develop proofs of concept, visualisations and creative solutions to the challenges, generating their own ideas and drawing on expertise from the Met Office and our partners where required.

Responding to the marine & coastal ‘Bridging the gap between our experiences and the science’ challenge, one team explored how to analyse data and communicate climate change through community-sourced storytelling, supplemented by data visualisations and stylised scientific illustrations. You can see the *STORY(coast)LINE* prototype here.

Meanwhile, the *30 x 30* team took on the nature-based solutions ‘What is the best use for our land?’ challenge. They looked at how we could get to 30% protected land/ocean by 2030 and what the consequences of some of the different choices would be. The progress they made can be seen here.

Hot Stuff was the name of one of the teams tackling the sustainable development ‘supporting the most vulnerable communities’ challenge. They sought to categorise the effect of extreme heat events on power generation and use it to identify countries vulnerable to future climate change. You can see the interface they started to develop here.

An artist from Three Blind Mice developed a series of scribes of the event including to illustrate the outputs for each of the three themes. You can see these by following the hashtag #ClimateDataChallenge.

The legacy

“We were thrilled and inspired by the quality and variety of outputs at the end of the event,” recalls Professor Jason Lowe OBE, Met Office Principal Fellow and Head of Climate Services for Government. “The event illustrated how much insight can be generated by bringing together and visualising data from different disciplines and domain experts, even in a relatively short time.”

In the coming weeks the Met Office organising team plan to meet with some of the teams involved to see how we can support them to continue the work they started during the Climate Data Challenge.

We are also exploring ways we can showcase the success of the event at COP26 in Glasgow in order to highlight the importance of using data innovatively to build solutions for climate resilience.

Involving a diverse range of organisations enabled hackathon delegates to benefit from a wealth of experience.

Jason said: “The effects of climate change and variability are already affecting people, and the challenges are likely to increase in the future. Events like the Climate Data Challenge are helping us better understand how society can manage the challenges on local, national and international scales. Avoiding the worst impacts of climate change will be easier with more people tackling the problem and trying to imagine inventive solutions.”

More to come…

Over the next few months, Met Office Academic Partners will also be hosting a series of hackathons. Follow #ClimateDataChallenge to find out more.

Date Created
April 2021

More changeable weather likely for bank holiday weekend

Description

Contrary to some media reports, the early May bank holiday weather is likely to be more changeable than recently, with showers and cool temperatures for most of the UK instead of the clear sunny skies of recent days.

As April draws to a close, cloud and showers will continue to move from northern Scotland south across the country. The showers will persist for many areas through the latter part of the week and into the bank holiday weekend. Central and southern England may see more persistent rainfall on Wednesday and Thursday and there is even a chance there could be some snow over the Scottish mountains.

Met Office Chief Operational Meteorologist Steven Ramsdale said, “The weather heading into the bank holiday weekend is going to be a little more unsettled than we’ve seen in recent days. There will be rain or showers at times for many, which is likely to be welcomed by many farmers and gardeners after a dry April so far. However, as is the nature of showers, there will also be some good dry and sunny spells so it’s by no means a wash out. Temperatures are likely to remain near to or below the average for the time of year with temperatures by day not expected above 14 or 15°C.”

These less settled and showery conditions are expected to continue into next week, but with a chance of a spell of more widespread rain and stronger winds, especially across southern parts, early on. Temperatures are likely to remain cool for the time of year.

Despite the frost, it has been a sunny month with sunshine for the UK already (1 – 25th April) 33% above the monthly average with 5 days of the month still to go. A full roundup of April's statistics will be available at the end of month. Visit the Met Office website for the latest forecast.

Date Created
April 2021

Frostiest April for at least 60 years in UK

Description

Frosty conditions have been common throughout April this year – Image: Shutterstock

April 2021 has provisionally been the frostiest in at least 60 years for the UK, topping the previous frostiest April in 1970, with records going back to 1960.

April 2021 has already seen an average of 13 days of air frosts reported for the UK, topping the 11 days seen in April 1970. The frosty conditions have been replicated across the UK, with England (12 days), Wales (11 days) and Scotland (16 days) also reporting their frostiest April since it began being reported in 1960. Northern Ireland has currently seen 8 days of frost, not yet exceeding their current record of 11 days set in April 1983.

Mark McCarthy, from the National Climate Information Centre, said, “We’ve been seeing a high frequency of frosts overnight throughout April thanks largely to persistent clear skies for most. This will be reflected in the end of the month statistics, which are already showing above average sunshine duration, as well as low minimum temperature readings overnight, with some parts of northern England and Scotland reporting minimum temperatures 3.5°C lower than the average for April.”

The conditions have been particularly challenging for the country’s farmers and growers. Chief Horticulturist at the Royal Horticultural Society Guy Barter said, “Considerable damage has been experienced in many gardens with flowers such as camellia and magnolias being scorched, and cherry, plum and pear blossom injured so that the fruit crop will be reduced.”

With the risk of frost persisting through this week, gardeners are being encouraged to keep tender

plants inside for now, or, if they must go out, cover them with cloches or horticultural fleece. You can check out our previous blog post on the expected weather this week and over the bank holiday weekend.

Current provisional frost figures across the UK in April (days):

UK – 13

England – 12

Southern England – 11

Northern England – 14

Wales – 11

Scotland – 16

Northern Ireland – 8

The full weather statistics for April 2021 will be available at the end of the month.

Date Created
April 2021